Kywoo3D Tycoon Slim

Kywoo Tycoon Slim 3D Printer User Manual

Model: Tycoon Slim

INTRODUCTION

Welcome to the Kywoo Tycoon Slim 3D Printer user manual. This guide provides comprehensive instructions for setting up, operating, maintaining, and troubleshooting your new 3D printer. Please read this manual carefully before use to ensure proper operation and to maximize the lifespan of your device.

Figure 1: Kywoo Tycoon Slim 3D Printer overview.

SAFETY INFORMATION

Always observe the following safety precautions:

- Do not touch the nozzle or heated bed during operation as they reach high temperatures.
- Ensure the printer is placed on a stable, level surface in a well-ventilated area.
- Keep the printer away from flammable materials and direct sunlight.
- Do not attempt to modify the printer or use non-original parts, as this may void the warranty and pose safety risks.
- Always disconnect power before performing any maintenance or cleaning.
- Keep out of reach of children and pets.

PACKAGE CONTENTS

Verify that all components are present in the package:

- Base Frame
- Gantry Frame (X-axis, Z-axis assembly)
- Filament Holder
- Power Cable
- USB Cable
- Tool Kit (wrenches, screwdrivers, pliers, etc.)

- SD Card with sample models and instructions
- Sample Filament
- User Manual (this document)

SETUP

1. Assembly

The Kywoo Tycoon Slim is designed for quick assembly. Follow these steps:

1. Carefully remove all components from the packaging.
2. Attach the gantry frame to the base frame using the provided screws. Ensure it is securely fastened.
3. Connect all necessary cables (stepper motors, endstops, hotend, heated bed, touch screen) according to the labels.
4. Mount the filament holder onto the designated position.

Figure 2: Key features and dimensions of the Kywoo Tycoon Slim, including integrated direct drive, X-axis linear rail, Y-axis smooth rods, dual Z-axis, and auto-leveling.

2. Initial Power On and Firmware Update

Before first use, it is recommended to check for and install the latest firmware from the official Kywoo website. This can add new features and improve performance.

- Connect the power cable and turn on the printer.
- The HD color touch screen will illuminate.
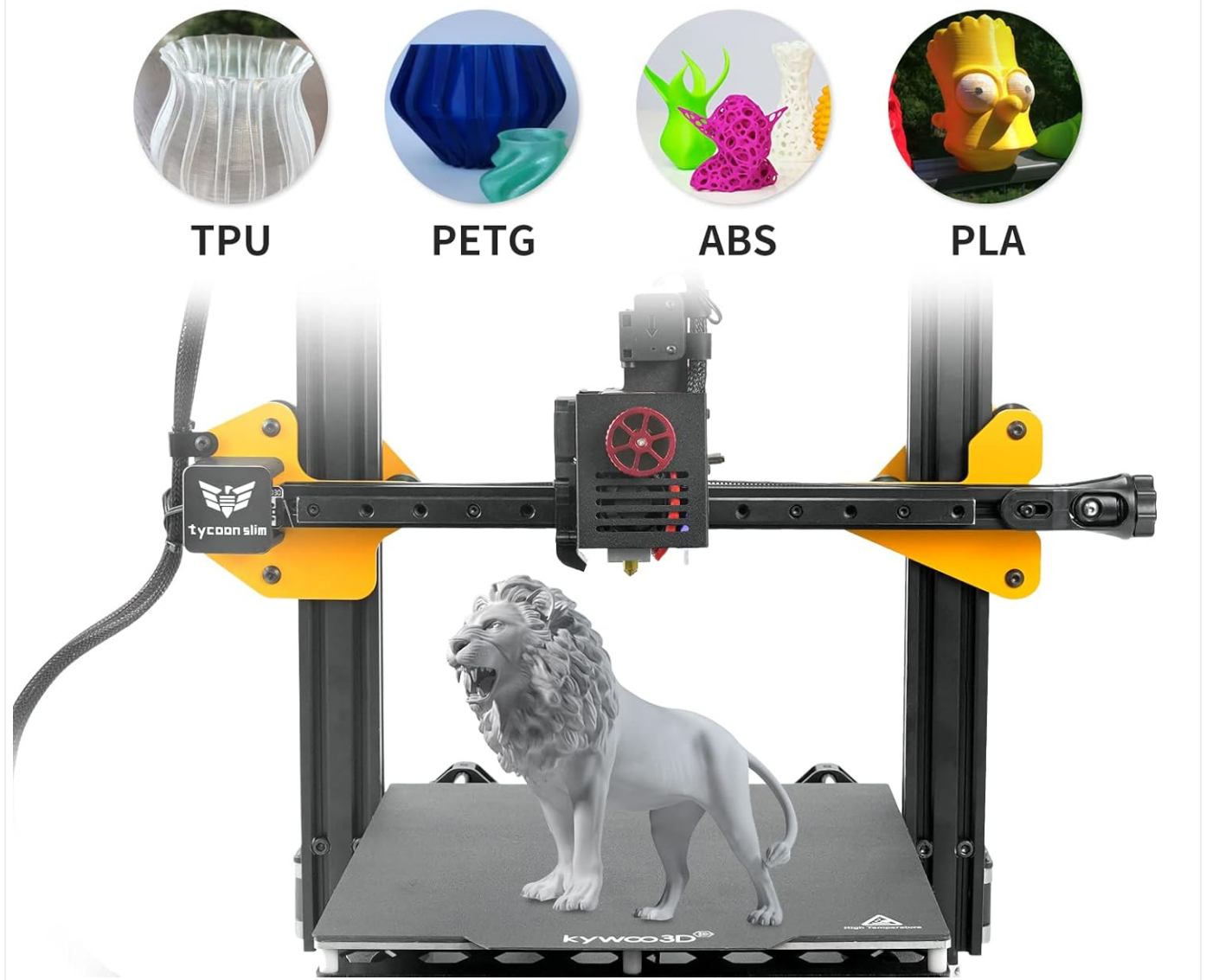- Navigate through the menu to set your preferred language (five language choices available).

Figure 3: The Kywoo Tycoon Slim features an HD color touch screen with an ergonomic interface, offering simple operation and five language choices for full accessibility.

3. Auto-Leveling Function

The Kywoo Tycoon Slim features an auto-leveling sensor (Kywoo Touch) for precise bed leveling. This function saves time and maximizes accuracy.

1. From the main menu, select the "Leveling" or "Auto-Level" option.
2. The printer will automatically probe multiple points on the print bed to create a mesh.

3. After auto-leveling, you may need to fine-tune the Z-offset. Refer to the included SD card for detailed instructions and videos on setting the Z-offset.

Figure 4: The auto-leveling function of the Kywoo Tycoon Slim automatically adjusts for bed inconsistencies, ensuring accurate and high-quality prints.

OPERATING

1. Filament Loading

The Kywoo Tycoon Slim features a direct drive extruder, compatible with a wide range of filaments including TPU, PLA, PETG, ASA, Wooden, and ABS.

1. Place the filament spool onto the filament holder.
2. Preheat the hotend to the recommended temperature for your filament type.
3. Insert the filament into the extruder's intake hole.
4. Gently push the filament until it is gripped by the extruder gears and begins to feed through the hotend. Continue feeding until molten filament extrudes from the nozzle.

X-Axis Linear Rail Design Makes Printing Smoother

A stable X-axis linear rail structure, dual Z-axis, and gantry frame improve accuracy by 30% vs traditional pulley systems.

Integrated Extruder Kit

The extrusion and heat dissipation structure is seamlessly integrated to avoid vibration and terrible wear, contributing to lower torque requirements on the step motor, and higher printing quality.
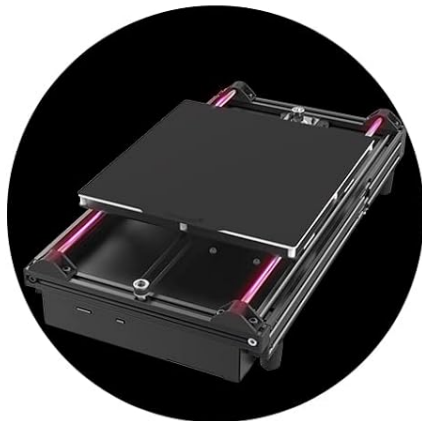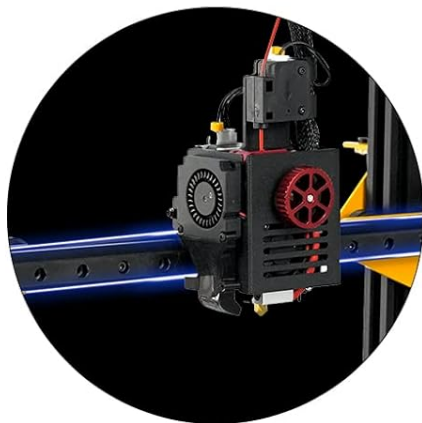

Figure 5: The direct drive extruder on the Tycoon Slim ensures smooth filament feeding and is compatible with various filament types like TPU, PETG, ABS, and PLA.

2. Starting a Print

To begin a print, you will need a 3D model file (.gcode) prepared using slicing software (e.g., Ultimaker Cura).

1. Save your .gcode file onto the provided SD card.
2. Insert the SD card into the printer's SD card slot.
3. On the touch screen, navigate to "Print" or "Files" and select your desired .gcode file.
4. Confirm the print. The printer will begin heating the bed and nozzle, then start printing.

The carbon-crystal silicon glass platform provides strong adhesion, preventing warping and allowing for quick manual mold removal.

Figure 6: The carbon-crystal silicon glass platform heats quickly and provides strong adhesion for prints, preventing warping.

MAINTENANCE

Regular maintenance ensures optimal performance and longevity of your 3D printer.

- **Clean the Print Bed:** After each print, allow the bed to cool and remove any residual filament. Clean the surface with isopropyl alcohol to maintain adhesion.
- **Clean the Nozzle:** Periodically clean the nozzle to prevent clogs. Use a brass brush or needle to remove any plastic residue.
- **Lubricate Moving Parts:** Apply a small amount of lithium grease or similar lubricant to the linear rails and Z-axis lead screws every few months.
- **Check Belts:** Ensure the X and Y axis belts are properly tensioned. The Kywoo Tycoon Slim features an adjustable belt tensioner for convenience.
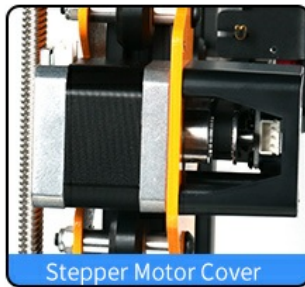- **Inspect Cables:** Regularly check all cables for wear or damage.

Figure 7: Key design features for maintenance and usability, including rotary feed-in wheel, adjustable belt tensioner, adjustable foot mat, hot-end cooling fan duct, stepper motor cover, and filament holder.

TROUBLESHOOTING

This section addresses common issues you might encounter.

Problem	Possible Cause	Solution
Filament not extruding	Clogged nozzle, incorrect temperature, tangled filament.	Clean the nozzle, verify hotend temperature, untangle filament.
Poor bed adhesion	Bed not level, dirty print surface, incorrect bed temperature.	Perform auto-leveling, clean print bed, adjust bed temperature.
Layer shifting	Loose belts, motor issues, print speed too high.	Check and tension belts, reduce print speed.
Printer not responding	Power issue, firmware error.	Check power connection, restart printer, consider firmware re-flash.

Smart Filament Sensor

The Kywoo Tycoon Slim is equipped with a smart filament sensor. In case of filament runout or breakage, the sensor will automatically pause the print, allowing you to load new filament and resume printing without losing progress.

Figure 8: The smart filament sensor detects normal supply (left) and alerts for material runout (right), pausing the print.

Resume Printing After Power Failure

The printer features a power-loss recovery function. If power is interrupted during a print, the printer can resume from the last recorded position once power is restored, preventing failed prints.

Figure 9: The printer's ability to continue printing after an accidental power loss.

SPECIFICATIONS

Feature	Detail
Brand	Kywoo3D
Model	Tycoon Slim
Print Size	240 x 240 x 300mm
Product Dimensions	24D x 24W x 30H centimetres (printer), 35 x 35 x 40 cm (package)
Item Weight	11 Kilograms
Material	Metal alloy
Color	Yellow, Black
Extruder Type	Direct Drive
Mainboard	32-bit with Silent TMC2209 drivers
Leveling	Auto-leveling (Kywoo Touch)
Power Supply	350W switching power supply
On-mode power consumption	350.00 watts

Figure 10: Dimensions of the Kywoo Tycoon Slim 3D Printer.

WARRANTY AND SUPPORT

Kywoo3D provides a 1-year guarantee on the 3D printer (excluding nozzle and heated bed sheet) and lifelong technical support with quick response in customer service.

For technical assistance or warranty claims, please contact Kywoo3D customer service. You may also find a very active Facebook group for community support and troubleshooting.

Related Documents - Tycoon Slim

 Kywoo3D Tycoon & Tycoon MAX User Manual
User manual for the Kywoo3D Tycoon and Tycoon MAX 3D printers, covering assembly, operation, features, troubleshooting, and specifications.

	[Kywoo3D Tycoon 3D Printer User Manual](#) Comprehensive user manual for the Kywoo3D Tycoon 3D printer, covering assembly, operation, settings, troubleshooting, and safety guidelines.
	[Kywoo3D Tycoon IDEX User Manual](#) Comprehensive user manual for the Kywoo3D Tycoon IDEX 3D printer, covering setup, operation, maintenance, and troubleshooting.
	[Kywoo3D Tycoon IDEX 3D Printer User Manual](#) Comprehensive user manual for the Kywoo3D Tycoon IDEX 3D printer, detailing setup, operation, troubleshooting, and technical specifications. Includes multilingual support information.